## DRAFT

RESPONSE UNDER 37 CFR 1.116

EXPEDITED PROCEDURE **EXAMINING GROUP 2811** 

> PATENT APPLICATION Do. No. 5484-48

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Byung-Sup SHIM and Young-Ho KIM

Serial No.

09/305,240

Examiner:

Naday, Ori

Filed:

May 4, 1999

Group Art Unit: 2811

For:

OPEN DRAIN INPUT/OUTPUT STRUCTURE AND MANUFACTURING

METHOD THEREOF IN SEMICONDUCTOR DEVICE

**BOX AF** 

Assistant Commissioner for Patents

Washington, D.C. 20231

FAX RECEIVED

MAR 1 8 2003

AMENDMENT AFTER FINAL REJECTION UNDER 37 CFR 1.116
TECHNOLOGY CENTER 2800

Responsive to the Final Office Action, dated January 3, 2003, please amend the application as follows.

## IN THE CLAIMS

Please replace the pending claims with the following set, in which claim 5 has been amended.

- A pull-up transistor disposed between a Vdd terminal and an I/O pad of a 5. semiconductor device comprising:
  - a semiconductor substrate of a first conductivity type;
- a source region and a drain region of a second conductivity type formed in the substrate and defining between them a channel region, one of the source region and the drain region being electrically coupled to the I/O pad, the other one of the source region and the drain region being electrically coupled to the Vdd terminal;

an impurity implantation region of impurities of a second conductivity type formed in a first sector of the channel region, the first sector not reaching either one of the source region and the drain region;

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